# V P

## **UNIVERSITY OF PANNONIA**

#### COURSE DATASHEET

Semester: 2015/16/1

Course: Petrolchemistry

Code: VEMKMOL413P

**Responsible department:** Department of Hydrocarbon and Coal Processing

Department code: MKOL

Responsible instructor: Dr. Norbert Miskolczi

#### Course objectives:

To develop an awareness of the sources of petrochemistry. Relationship of petrochemical industrywith other industries.

#### Course content:

- 1. Introduction, history of petrochemistry. Raw materials. Regional petrochemical industry.
- 2. Relationship of refining and petrochemical industry. Olefin production.
- 3. Production and processes of raw materials of petrochemical industry
- 4. Production and processes of raw materials of petrochemical industry
- Relationship of petrochemistry and plastic processing industry. Economics of petrochemistry.
- 6. Plastic industry. Plastic production, consumption, uses. Polymer stereochemistry. Mass plastics and engineering plastics.
- 7. Base reactions of plastic production.
- 8. Production plastics (poliolefins).
- 9. Production plastics (ABS, PVC, PS).
- 10. Production plastics (PA, PC).
- 11. Production plastics (polyesters, polyurethanes, resins).
- 12. Plastic processing.
- 13. Plastic additives. Biodegradable plastics. Trends.
- 14. Role of plastics in energy and raw material sawing. Plastic wastes. Costs.
- 15. Process safety in peltrochemical sector.

#### Requirements, evaluation and grading:

Please see in TVSZ; Possibilities for repeating the subject: - Accepted equivalent subjects: - Learning efforts necessery to satisfy the requirements of the subject: 45h/45h

#### Required and recommended readings:

Matar, Sami; Hatch, Lewis Frederic (2001). Chemistry of petrochemical processes (2 ed.). Gulf Professional



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